IN THE CLAIMS

1. (Currently amended) A data processing device, comprising a master controller, a
    first functional unit including a slave controller, a second functional unit, and a
    common memory means shared by the first and second functional units, the data
    processing device being programmed for executing an instruction by the first
    functional unit, execution of said instruction involving input/output operations by
    the first functional unit, wherein said execution involves at least one of: output
    data of the first functional unit being processed by the second functional unit in
    the midst of execution of said instruction, and the input data to the first functional
    unit being generated by the second functional unit in the midst ofduring execution
    of said instruction.

2. (Previously presented) The data processing device according to claim 1, wherein
    the first functional unit is arranged for processing instructions of a first type
    corresponding to operations having a relatively large latency and the second
    functional unit is arranged for processing instructions of a second type
    corresponding to operations having a relatively small latency.

3. (Previously presented) The data processing device according to claim 1, having
    halt means controllable by the master controller for suspending operation of the
    first functional unit.

4. (Currently amended) A method of operating a data processing device, comprising:
    a master controller for controlling operation of the data processing device,

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a first functional unit, which includes a slave controller, the first functional

unit being arranged for executing instructions of a first type corresponding to

operations having a relatively long latency,

a second functional unit capable of executing instructions of a second type

corresponding to operations having a relatively short latency, wherein the first

functional unit during execution of an instruction of the first type receives input

data and provides output data, and said execution involves at least one of: output

data of the first functional unit being processed by the second functional unit in

the midst of during execution of said instruction, and input data to the first

functional unit being generated by the second functional unit in the midst of

execution of said instruction.

5. (Previously presented) The method according to claim 4, wherein the master

controller temporarily suspends operation of the first functional unit during

execution of instructions of the first type.

6. (Withdrawn)

7. (Withdrawn)

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